IN THE CLAIMS:

Please amend Claims 16, 18 and 21-23 and add new Claims 24-27 as follows.

Claims 1-15. (Cancelled).

16. (Currently Amended) A color-information processing method for displaying a three-dimensional object of color distribution based on sample points, said method comprising:

a color-distribution-information input step, of inputting color coordinate values in a second color system corresponding to sample points in a first color system;

a viewpoint information setting step, of setting a viewpoint information according to a user instruction;

a range setting step, of setting a range to be displayed according to a user instruction;

~~a user's instruction input step, of inputting a user instruction relating to an operation of generating a three-dimensional object;~~

a step of selecting sample points ~~in accordance with~~ corresponding to said range ~~user instruction~~ from the sample points in the first color system and obtaining the color coordinate values in the second color system corresponding to said selected sample points;

a generation step of generating surface information of the three-dimensional object based on the obtained color coordinate values in the second color system and

generating color information of the surface of the three-dimensional object based on the obtained color coordinate values in the second color system; and

a display step of displaying the three-dimensional object of the color distribution based on said surface information of the three-dimensional-object and the color information of the surface.

17. (Previously Presented) A method according to Claim 16, wherein the sample points are regularly placed in the form of a grid in the first color system.

18. (Currently Amended) A method according to Claim 16, wherein said ~~user's-instruction input step~~ range setting step of ~~inputting~~ setting grid ranges for each color component in the first color system ~~and said generation step of generating the surface information of the three-dimensional object is based on the obtained color coordinates of the sample points within the grid ranges~~.

Claims 19 and 20. (Cancelled).

21. (Currently Amended) A computer-readable medium encoded with a computer program for executing a color-information processing method for displaying a three-dimensional object of color distribution based on sample points, said program comprising:

a color-distribution-information input step, of inputting color coordinate values in a second color system corresponding to sample points in a first color system;

a viewpoint information setting step, of setting a viewpoint information according to a user instruction;

a range setting step, of setting a range to be displayed according to a user instruction;

~~a user's-instruction input step, of inputting a user instruction relating to an operation of generating a three-dimensional object;~~

a step of selecting sample points ~~in accordance with~~ corresponding to said ~~user instruction~~ range from the sample points in the first color system and obtaining the color coordinate values in the second color system corresponding to said selected sample points;

a generation step of generating surface information of the three-dimensional object based on the obtained color coordinate values in the second color system and generating color information of the surface of the three-dimensional object based on the obtained color coordinate values in the second color system; and

a display step of displaying the three-dimensional object of the color distribution based on said surface information of the three-dimensional object and the color information of the surface.

22. (Currently Amended) An apparatus for processing color-information for displaying a three-dimensional object of color distribution based on sample points, comprising:

color-distribution-information means for inputting color coordinate values in a second color system corresponding to sample points in a first color system;

viewpoint information setting means for setting a viewpoint information according to a user instruction;

range setting means for setting a range to be displayed according to a user instruction;

~~means for inputting a user instruction relating to an operation of generating a three-dimensional object;~~

a selector to select sample points ~~in accordance with~~ correspond to the ~~user instruction~~ range from the sample points in the first color system and to obtain the color coordinate values in the second color system corresponding to the selected sample points;

a generator for generating surface information of the three-dimensional object based on the obtained color coordinate values in the second color system and generating color information of the surface of the three-dimensional object based on the obtained color coordinate values in the second color system; and

a display to display the three-dimensional object of the color distribution based on the surface information of the three-dimensional object and the color information of the surface.

23. (Currently Amended) An apparatus for processing color-information for displaying a three-dimensional object of color distribution based on sample points, comprising:

a color-distribution-information device to input color coordinate values in a second color system corresponding to sample points in a first color system;

a viewpoint information setting device to set a viewpoint information according to a user instruction;

a range setting device to set a range to be displayed according to a user instruction;

~~an input device to input a user instruction relating to an operation of generating a three-dimensional object;~~

a selector to select sample points ~~in accordance with~~ corresponding to the ~~user instruction~~ range from the sample points in the first color system and to obtain the color coordinate values in the second color system corresponding to the selected sample points;

a generator for generating surface information of the three-dimensional object based on the obtained color coordinate values in the second color system and generating color information of the surface of the three-dimensional object based on the obtained color coordinate values in the second color system; and

a display to display the three-dimensional object of the color distribution based on the surface information of the three-dimensional object and the color information of the surface.

24. (New) A method according to Claim 16, wherein the surface information includes a display mode, the number of surfaces and a plurality of compositional data.

25. (New) A method according to Claim 16, wherein said display step performs pseudo-three-dimensional display of the three-dimensional object of the color distribution.

26. (New) A method according to Claim 17, wherein said range setting step sets an internal layer to be displayed.

27. (New) A method according to Claim 17, wherein said three-dimensional object consists of triangles, which are selected from two combinations of triangles considered to be contained in a minimum quadrangle formed by the grids such that a volume of said three-dimensional object is increased in size.